

**ORGANIC CHEMISTRY**  
**Nomenclature/Structure Review**

Fill in the blanks to complete the table below

Structure	Functional Group, or “alkane, alkene, alkyne”	Number C’s used to determine prefix	Name	Formula
	Alkane	8		
			2-pentanol	
	Aldehyde	6		
				CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> COOH
			3-heptene	

Structure	Functional Group, or “alkane, alkene, alkyne”	Number C’s used to determine prefix	Name	Formula
				HCCH
	Ester	Made from 1-hexanol and menthanoic acid		
				H <sub>3</sub> CCOCH <sub>2</sub> CH <sub>3</sub>
			3,3-dichlorononane	

Calculate the heat of combustion of ethyne using bond energies: